Title (en)
DUAL FREQUENCY FMCW LIDAR AND METHOD

Title (de)
DOPPELFREQUENZ-FMCW-LIDAR UND VERFAHREN

Title (fr)
LIDAR FMCW À DOUBLE FRÉQUENCE ET PROCÉDÉ

Publication
EP 3574337 A4 20201111 (EN)

Application
EP 17893678 A 20170531

Priority
• US 201762450047 P 20170124
• US 2017035320 W 20170531

Abstract (en)
[origin: US2018210068A1] A lidar including a laser having a first frequency-modulated laser radiation and a second frequency-modulated laser radiation, a first waveguide coupled to the laser, wherein the first frequency-modulated laser radiation and the second frequency-modulated laser radiation are transmitted by the laser into the first waveguide, a second waveguide, a filter coupled between the first waveguide and the second waveguide, wherein the filter is configured to couple and pass the first frequency-modulated laser radiation through the filter to the second waveguide, and is configured to not couple or pass the second frequency-modulated laser radiation through the filter to the second waveguide, and a photodetector coupled to the second waveguide.

IPC 8 full level
G01S 7/4912 (2020.01); **G01S 17/34** (2020.01); **G01R 31/28** (2006.01); **G01R 35/00** (2006.01); **G01S 7/481** (2006.01); **G01S 17/58** (2006.01); **H04L 27/10** (2006.01); **H04L 27/144** (2006.01)

CPC (source: EP US)
G01R 31/2829 (2013.01 - EP US); **G01S 7/4818** (2013.01 - EP US); **G01S 7/4917** (2013.01 - EP US); **G01S 17/34** (2020.01 - EP US); **G01S 17/58** (2013.01 - EP US); **H04B 10/40** (2013.01 - US); **H04B 10/50** (2013.01 - US); **H04B 10/60** (2013.01 - US); **H04L 27/103** (2013.01 - EP US); **H04L 27/144** (2013.01 - EP US); G01R 35/005 (2013.01 - EP US)

Citation (search report)
• [XAI] US 2016011312 A1 20160114 - LEYVA VICTOR [US]
• [A] US 5534993 A 19960709 - BALL GARY A [US], et al
• [A] US 2014233013 A1 20140821 - SAKIMURA TAKESHI [JP], et al
• See also references of WO 2018140075A1

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)
US 10670721 B2 20200602; **US 2018210068 A1 20180726**; CN 110268280 A 20190920; CN 110268280 B 20230808; EP 3574337 A1 20191204; EP 3574337 A4 20201111; EP 3574337 B1 20221123; WO 2018140075 A1 20180802

DOCDB simple family (application)
US 201715609788 A 20170531; CN 201780081650 A 20170531; EP 17893678 A 20170531; US 2017035320 W 20170531